

THE

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"NEC TENUI PENNĀ."

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Original.

INFLAMMATION OF THE MAMMARY GLAND.*

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It will be the province of this paper to direct attention to inflammatory troubles of the mammary gland, including also reference to fissure and excoriation of the nipple, with particular suggestions as to causation, results, and treatment. Some authorities appear to have considered these troubles rather unimportant, and consequently much of the information concerning them is vague and indefinite. True, the beginning is insignificant, but if we follow a case from a simple abrasion or minute fissure of the nipple through destructive abscess and slough, associated with severest suffering, we can not refuse to accord the importance due, and be forcibly reminded that neglect or ill-advised treatment of these unpretending caution signals often results in direst consequences.

Many, indeed most, of us are denied the privilege of doing great things, so we must hope for distinction by doing little things well. As much credit is attached to curing a fissured nipple as to amputating a thigh; the ultimate danger is not so great, but the suffering is hardly less intense, and cure is accomplished in the one case about as soon as the other. Any thing new on this subject must not be expected, but if success is had in eliciting such exchange of opinion as will enable us to better understand and practice what is known, the object of this paper will be attained.

There are few practitioners who have not met and been sorely puzzled with a fissured nipple that has obstinately resisted

all treatment, continually getting worse, terminating in abscess. Recourse to authorities and friends suggests a magnificent array of remedies which are deemed infallible, but which never fail to fail when success is most desired.

Of the causes of mastitis, there can be little doubt that abscess always, or nearly always, begins as an erosion, excoriation, or fissure of the nipple. This opinion is supported by most of the modern authors. Of course blows or other direct injuries are excepted. (I have recently seen a case in which there was subcutaneous inflammation in the left breast and parenchymatous inflammation in the right breast, both originating or being preceded by trouble in the nipple, both terminating in abscess, the inflammation extending by the lymphatics or cellular connective tissue from the fissure or abrasion to the deep structures of the gland.) The theory that abscess is caused by obstruction to the flow and accumulation of milk in the ducts and acini is unfounded on facts, and can not be demonstrated. In support of this assertion such authorities as Lusk, Winckel, Ramsbotham, Parry, McClintock, Thomas, Sawyer, and Harris may be referred to. Hence, the treatment directed to removing the milk by pumping, massage, or rubbing, with or without oil, while it may temporarily relieve the distension to a certain degree, is misdirected. It neither prevents nor cures an abscess. But at the feet of this treatment may be laid with some degree of assurance, not only the sin of omission, but the worse one of commission; in other words, it is more than probable that abscesses of the breast are sometimes caused directly, and at others hastened by the very means adopted for their prevention. Milk can be rubbed or pumped or nursed from a sound breast simply engorged, but with not much success from an inflamed one; when accumulated in the ampulæ of the galactophorous

*Read before the Kentucky State Medical Society at Crab Orchard, June 26th.

ducts it may be removed by any of the ordinary means, but not from the glands or acini beyond the site of inflammation. "An interesting series of observations bearing on this subject have been deduced from analyses conducted by M. Péligré with the view to ascertaining the nutritive value of the lacteal secretion at various epochs. From these analyses it would appear that the longer the milk remains in the breast the thinner and more aqueous does it become." A natural deduction would be that it is then more readily reabsorbed.

The cause of the subglandular variety, according to Billroth, is to abscess formation in the deep-lying glandular structures, the pus perforating the fascia-like connective tissue at the base of the organ into the loose connective tissue situated between the gland and pectoral muscle. If this be correct, there is reason to suppose the lymphatics have, in some instances, carried the first poison from an inflamed or fissured nipple to the site of the abscess. Barker, in giving the varieties of abscess of the breast, refers to the subcutaneous, glandular, and subglandular; giving as a cause of the glandular or parenchymatous variety, the structural changes which succeed lacteal obstruction or engorgement when either of these exist. From later observations, and in accordance with the above given cause, it is more probable that the trouble is not so much due to the engorgement as to the means adopted for its removal.

It is a singular fact, and one from which a valuable lesson as to treatment should be drawn, verified by personal experience and all the literature that I have seen, that abscess never occurs in a puerperal breast which has never been nursed. In hospital practice good opportunity is afforded for observation of this kind, for the reason that a large proportion of the infants are given away or otherwise disposed of. The rational explanation is, that patients at this time during the lying-in period are confined to bed and are at perfect rest, on a low and unstimulating diet, and usually some application is made to the breasts. However, little is to be expected from local applications.

From analogous processes during inflammation in other organs it is reasonable to suppose that the lacteal secretion is seriously interfered with in decided inflammation of the gland. Harris states this as a fact; and even when the secreting parts themselves are not invaded, the adjacent structures

being inflamed must affect the neighboring glands. Acute Bright's Disease of the kidney affords a similar example.

A brief consideration of the results of suppurative inflammation in the mammary gland will not be out of place. A breast once the seat of destructive abscess may and does leave cicatrices and lumps which remain for many years; which interfere very seriously with subsequent lactation in after pregnancies, and also from which develop both malignant and non-malignant growths. By far the most important after-result is cancerous growths, having their origin in these scars and lumps. Literature on this subject is very meager. Reasoning from the stand-point of the local origin of cancer, this opinion is easily tenable. J. Birkett, in Guy's Hospital Reports, says, on this point, "that, as regards lactation, he has failed in establishing any *marked relation* between the imperfect performance of this function and the subsequent development of cancer." From Clement Nodson we have this view: "Fissures and excoriations of the nipples often lead to abscess, and it is said that it may sometimes lead to malignant disease." Erichsen, writing of the causes of cancer of the breast, says: "Its peculiar frequency in the female may possibly be owing to the great and sudden alternations of the functional activity of the breast in women. The changes impressed on this organ at puberty and during pregnancy, the various alternations which it undergoes, the inflammatory affections to which it is subject during lactation, the frequent irritation to which it is exposed by sympathizing with uterine derangement and the diminution in its activity at the change of life, are sufficient to explain the great liability of this organ to disease generally; and may not improbably give a clue to the reason why it is peculiarly the seat of cancer in women." More directly to the point is what we get from the admirable monograph on "Tumors of the Mammary Gland," by Professor Samuel W. Gross. He writes: "Another assumed predisposing cause of carcinoma is puerperal mastitis resulting in chronic circumscribed indurations, which are composed of glandular structure surrounded by densely hard or cicatricial connective tissues. Hence, these lumps do not differ from the normal breast during senile involution, and it is quite natural that, during a subsequent lactation, or under the influence of the period of life when carcinoma may be looked for, the included lacteal

glands should not react physiologically, but grow atypically and lay the foundation of cancer. Of three hundred and sixty-five women who had borne children, there was antecedent mastitis in seventy-one, but in only thirty of these did an induration remain from which carcinoma originated. Hence, the disease appears to be connected with this condition in 8.21 per cent of all cases." Dr. Gross has not given this enough prominence, as his own figures will demonstrate. Look at these figures in this way, which is a perfectly legitimate use of them: We have seventy-one cases of mastitis and thirty cases of cancer resulting; while the figures show 8.21 per cent of all who had borne children developing cancer, they also show 42.25 per cent of the cases of mastitis developing cancer. This startling deduction will induce us not only to use our best endeavors for cure, but also prevention.

Treatment. A good deal may be done by prophylaxis, but it is extremely difficult to induce women whose breasts are giving little or no trouble to follow directions in the matter of absolute cleanliness, and the necessary care as to the application of astringent or hardening lotions. It is to these that we must look for prevention. By the most assiduous care in the beginning to abrasions and fissures much suffering and a large proportion of abscesses may be prevented. Should they, however, resist all palliative measures, the treatment recommended for inflammation or "caking" is advised, and this in no instance should be too long postponed.

For management of inflammatory conditions of the gland or subcutaneous tissue the ordinary treatment usually advised is rubbing, massage, keeping the breast empty by the breast-pump, child, or nurse, application of poultices, belladonna, and many other medicines. If the milk-ducts be obstructed by inflammation in its own structure or in tissues adjoining, rubbing, pumping, or any means adopted for removing the milk can not be very effective, but by calling more blood to the part aggravates and does much harm. The breast-pump is possibly allowable, but should be used with great care and only to glands not in a state of active inflammation. It can hardly draw away the products of inflammation. Rubbing a breast that has obstructed ducts for the purpose of abstracting milk is like making pressure on a distended bladder resulting from stricture of the urethra to remove the accumulated urine.

Rubbing the breasts, according to Barker, in the subcutaneous and subglandular varieties is absolutely pernicious and worse than useless. He might well have added this concerning the remaining form. If, as he further affirms in conjunction with many others, that belladonna, the most popular local application, has no effect in checking the lacteal secretion, then we see many cases get well without any treatment. These are the cases whose condition compels them to remain quiet and in bed, and live on light diet. All attention appears to be directed to getting rid of the milk in the above lines of treatment indicated, and in this respect is fallacious, for the milk can be shown to be innocuous. Compression by means of plaster to remove induration, prevent purulent infiltration and formation of obstinate fistulous sinuses is strongly advocated by many, and is an admirable treatment. In epididymitis, inflammation of a gland of analogous anatomical structure, we all recognize strapping and rest as one of the very best methods of procedure, so the same beneficial effects may be obtained in inflammation of the mammary gland. However, my experience in strapping the breast with adhesive plaster, while it has been gratifying in some respects has been very disagreeable in others. That plaster which is incomparably the best, viz., the rubber adhesive, does admirably until its removal is desired. The suffering caused by attempts to remove it from an already tender and painful part by pulling on the fine hairs that cover the surface is intense, and has produced so much distress that I have determined never to apply it again when any other treatment is admissible.

Applications can do little good in cases of fissure or excoriation as long as the child nurses or the pump is used; for whatever may be gained by the medicine is lost by the wounded part being torn open by the attempts to remove the milk. Cocaine, according to the recent journals, has been applied to fissure with strikingly beneficial results. I have had no experience with it.

The obvious indications in these troubles is to give the parts absolute rest, just as is done in treating wounds elsewhere. But the puzzling question is, what can be done with this secreting organ during the process of repair in the wound? I have tried nearly every thing mentioned by authors on this subject, but without uniform satisfaction. Just here comes in the timely and admirable article of Dr. Philander Harris, in

the Am. Journal of Obstetrics, on this subject. His proposition, backed by experience, is to let the milk take care of itself. His experience proves it not only a harmless but a safe measure. He claims that the milk is entirely innocuous to the gland, and will not of itself cause abscess. He further claims that nursing can be resumed after the fissure is cured, or the inflammation has subsided, in from one to fifteen days. I have succeeded in bringing on the flow of milk ten days after the birth of the child in a very unpromising case. There are many records of interesting and remarkable cases of grandmothers and others resuming this obligation after many years of quiescence in the mammary gland.

At the risk of being tiresome I will state as briefly as possible what Dr. Harris proposes to do with the bandage and rest in the management of these affections. His results are so satisfactory, his conclusions so just, and at the bottom of all of it is so much common sense, that I do not hesitate to fully indorse him on the ground he takes. His procedure in an obstinate fissure, or an excoriation that has proven intractable to other treatment, or in inflammation either threatened or existing, is to use plenty of absorbent cotton to envelope the breasts, and then apply a roller bandage twenty yards long by two to two and one-fourth inches wide—first making a few turns of the bandage under the arm and affected breast and over the opposite shoulder, lifting the gland well up, thence straight around under both breasts, thence two or three times over the shoulder not covered and under its opposite or the well breast. This constitutes his half-dressing. The full-dressing consists in carrying the bandage around the body over the affected breast and beneath the well breast, thence around the body above both breasts, thence under the affected breast and over the well breast. The bandaging is thus continued until both glands are completely covered; the nipple of the well breast being left exposed, the inflamed one covered. If both are involved, then both are covered. Finally he secures the bandage with safety-pins where it crosses or diverges or where it is liable to slip. When necessary morphine or other anodyne is given to relieve pain. "The first day the breast fills and becomes quite tense, the inflammatory blush is more marked and may have extended a little. Some breasts drain their secretion. Some do not. The bandage is removed and reapplied as be-

fore and left for another day. The breast will then be found more enlarged, but there is less soreness and inflammatory induration and little or no pain. Readjust bandage for another day. By this time the breast, whether it has drained or not, will be found generally to have reached its maximum degree of distension, and we now usually note a very marked retrogression of symptoms. When first applied the bandage may be allowed to remain as long as it stays in place, is comfortable to the patient and there is no pain; otherwise it should be reapplied every day. A cooling lotion, as spirits of camphor or listerine, may be poured on the bandage. After the redness, pain, swelling, induration, and soreness have disappeared, apply bandage with the nipple exposed, and put the child to nursing; the functional activity is brought into action under the natural stimulus of nursing and the flow of milk becomes re-established. In greatly distended breasts the patient may be restricted in quantity of drink and fluid nourishment, and must abstain from all exercise or work necessitating movement of the arms."

When suppuration is inevitable then the sooner the pus is evacuated the better; this is best done by free incision from the nipple outward to avoid cutting the milk-ducts. After lancing the bandage should be reapplied, for by this we keep the surfaces of the abscess cavity in contact and thereby hasten the cure. When multiple abscesses have occurred, the treatment recommended by Billroth is the best; it consists in anesthetizing the patient, making a free opening with a bistoury, then, with the finger, breaking down all partitions between cavities, making one large cavity, which is treated antiseptically.

THE fifty-third annual meeting of the British Medical Association will be held at Cardiff, on Tuesday, Wednesday, Thursday, and Friday, July 28th, 29th, 30th, and 31st, 1885. President, James Cuming, M. D., F. K. Q. C. P., Belfast. President-elect, W. T. Edwards, M. D., F. R. C. S., Cardiff.

A GLASS of beer three times a day, with meals, is highly spoken of in the treatment of severe vomiting of pregnancy.

THE German Imperial Board of Health will soon publish a weekly journal for the record of its statistics, reports, and papers.

Miscellany.

SYRUPUS ROBORANS.—The value of the hypophosphites as therapeutic agents is now so generally recognized as to need no more than a passing suggestion when a new preparation containing or representing them is announced. Rapid advances in manipulative pharmacy have made practicable the exhibition of these compounds in a form which until recently has scarcely been attempted. Instead of the nauseous, changeable, and consequently variable mixtures hitherto presented, we are now furnished with an elegant, stable, definite, and palatable preparation bearing the above title. The name of its well-known makers, Messrs. Arthur Peter & Co., of this city, is a sufficient guarantee that at all times the preparation will be of the same high degree of excellence as now.

DR. SIMON BORUCH in an interesting article (New York Medical Journal) on the Therapeutic Significance of the Cervical Follicles, summarizes as follows:

1. A thorough knowledge of the anatomy, physiology, and pathology of the cervical follicles will simplify the treatment of many uterine affections.

2. The cervix uteri represents a large gland of active and important function in the various sexual relations of woman.

3. In the majority of the more common diseases of the uterus the mucous membrane and its follicles play the most important rôle. A recognition of this fact will make treatment more successful.

4. Metritis, subinvolution, hyperplasia with catarrh, erosions, etc., must be studied in connection with the glands of the cervix.

5. In obstinate cases medicinal applications fail because the secreting surfaces of the follicles are not reached. Scarification and the curette are valuable adjuncts in nulliparous women or in parous women without cervix laceration.

6. In parous women with lacerations, trachelorrhaphy is the most valuable procedure. As a simple plastic operation it will fail. Success depends on extirpation of the follicles, which is more important than "removal of the cicatricial plug."

7. The microscope demonstrates the dependence of catarrh, ulceration, erosion, and hypertrophy of the cervix, and often also of the body of the uterus, upon the glandular structure of the cervix uteri.

8. The cervical follicles are significant as elements in the pathology of cervix cancer, because the microscope demonstrates the dependence of the latter upon erosions, which are based upon the gland structure.

9. Laceration and erosion must be regarded with suspicion, as possible sources of future malignant disease. * In operating for their removal, extirpation of the cervical follicles must be unsparing.

INTERMEDIATE TRANSPLANTATION OF A PIVOT TOOTH WITH RESTORATION OF FUNCTION.—The Medical Record tells the following:

A lady in South Bend, Ind., who had a false tooth set on a pivot, sneezed it out the other day while feeding chickens. An old hen thought it was a grain of corn and swallowed it as soon as it struck the ground. After a long chase the hen was captured, beheaded, its crop opened, the tooth found, and restored to the lady's mouth, where it afterward helped to masticate the old hen.

DR. ALT reported a case to the *Verein Deutscher Aerzte* (Weekly Medical Review), in which one one-hundred-and-twentieth of a grain of duboisin applied to the eye produces symptom of poisoning by that drug. Delirium, dry throat, and quick pulse were observed. Morphia, one eighth grain, and chloral, fifteen grains, were given to counteract its effect.

TINCTURE OF IODINE IN THE TREATMENT OF INTERMITTENT FEVER.—Schabliovsky (*Russakaja Medicina; Dtsch. Med.-Ztg.*) has treated twenty-six cases of intermittent fever with tincture of iodine, ten drops being given three times a day. A cure resulted in every instance without unpleasant consequences.—*New York Medical Journal.*

TURPENTINE IN THE TREATMENT OF DYS-ENTERY.—Genkin (*Wratsch; Dtsch. Med.-Ztg.*) commends the use of oil of turpentine in doses of ten drops to a teaspoonful of castor-oil, and states that he has produced better results with it than by using opium. In only seven out of fifty-nine cases was there any disturbance of the urinary organs.

PROF. VOLKMANN, of Halle, has had the order of nobility conferred upon him by the German Emperor.

DR. NOEL GUENEAU DE MUSSEY, a prominent French physician, is dead.

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DESTRUCTION.

The work of reconstruction done at the recent meeting of the American Medical Association's Committee on the International Medical Congress seems not to have commended itself to the critical taste of the old committee's appointees in Philadelphia, as the following, from the Philadelphia Medical News of July 4th, shows beyond doubt:

A meeting of the members of the medical profession of Philadelphia concerned in the organization of the International Medical Congress of 1887 was held at the Hall of the College of Physicians, on Monday, June 29th. Dr. Alfred Stillé in the Chair. Dr. David W. Yandell, of Louisville, was present by invitation.

After hearing a report of the proceedings of the new committee, at the meeting held in Chicago last week, and, after considering the changes in the organization which were made, including the restriction of the scope of the membership, by which a large proportion of the profession of the country would be excluded from the Congress, the following preambles and resolution were unanimously adopted:

WHEREAS, Certain serious changes have been recently effected in the preliminary organization and rules for the International Medical Congress of 1887, it has seemed desirable for the members of the General Committee and the officers of the Sections resident in Philadelphia to meet for consultation; and

WHEREAS, It has appeared that these changes are inconsistent with the original plan, and detrimental to the interests of the medical profession in America, and of the International Medical Congress; therefore, be it

Resolved, That we, the undersigned, consider that our duty to the profession and to ourselves requires us to decline to hold any office whatsoever in connection with the said Congress as now proposed to be organized.

D. HAYES AGNEW,	S. WEIR MITCHELL,
ROBERTS BARTHOLOW,	WILLIAM F. NORRIS,
JOHN H. BRINTON,	WILLIAM OSLER,
CHARLES H. BURNETT,	JOHN H. PACKARD,
R. A. CLEEMANN,	THEOPHILUS PARVIN,
J. M. DA COSTA,	WILLIAM PEPPER,
LOUIS A. DUHRING,	EDWARD T. REICHAERT,
WILLIAM H. FORD,	ALBERT H. SMITH,
WILLIAM GOODELL,	ROBT MEADE SMITH,
SAMUEL W. GROSS,	ALFRED STILLÉ,
ROBERT P. HARRIS,	GEO. STRAWBRIDGE,
I. MINIS HAYS,	WILLIAM THOMSON,
WILLIAM W. KEEN,	JAMES TYSON,
JOSEPH LEIDY,	HORATIO C. WOOD,
DAVID W. YANDELL.	

Drs. Billings, Brown, Johnston, and Hays, of the original committee of seven, have resigned from the enlarged committee.

When the influence of all and the commanding eminence of many of these names are taken into account, it is clear that the strength and effectiveness of the Congress will suffer materially through their disappearance from the list of its committees and section officers; while it is equally clear that if a like spirit, leading to like action, prevails among the old appointees resident in the other great Eastern cities, the proposed International Medical Congress for 1887 can not be successfully conducted on American soil.

For, however proud the West and South may be of their great lights in medicine, it is a fact which need not be minced that these are not numerous. 'T is true that we can boast of many learned and brilliant men; but nevertheless the fact holds, that our original investigators in medical science and the writers of our classic medical books are, with few exceptions, residents of our eastern coast cities. These are the men who have made the fame which American medicine enjoys beyond the sea, and these

are they whom distinguished foreigners will expect to meet at the coming Congress. If, therefore, the names of our most eminent authors and discoverers do not appear upon the published statement of the Rules and Preliminary Organization of the Ninth Congress, we need not look for any distinguished delegation from abroad.

But while the situation is not conducive to the credit of American medicine abroad or prophetic of success for the Congress, we must not lay too heavy blame upon the devoted heads of the reconstruction committee. This body worked, we believe, conscientiously, endeavoring as best it could to do the will of the society which gave it appointment. Its members could not in the logical fitness of things retain the New York new-coders, while the terms of their commission compelled them to make the lists of the committees, section officers, and councils representative in a geographical sense of the profession in America. That the committee's work was somewhat too sweeping must be admitted, and that trouble would follow could be readily foreseen; but its members can scarcely in reason be held responsible for the ruin wrought.

The whole blame must rest upon the shoulders of the American Medical Association, who, after appointing a committee of seven wise and eminent men to arrange the preliminary work of the Congress, should have consented to question their judgment and meddle with their work at the instance of a few disaffected but persuasively eloquent fellows.

At the next meeting of the Association there will doubtless be made a sublime attempt to undo the mischief, but nearly two years will then have been lost, with many if not all opportunities for making the Congress a brilliant success.

DR. M. ALLEN STORR has been made professor of Diseases of the Mind and Nervous System in the New York Polyclinic.

Bibliography.

A Manual for the Practice of Surgery. By THOMAS BRYANT, F. R. C. S., Member of the Council and Court of Examiners of the Royal College of Surgeons; Senior Surgeon to and Lecturer on Surgery at Guy's Hospital, etc. With seven hundred and twenty-seven illustrations. Fourth edition, thoroughly revised. Philadelphia: Henry C. Lea's Son & Co. 1885. For sale by John P. Morton & Co. Imperial, 8vo, pp. xviii and 1039. Cloth, \$6.50; leather, \$7.50; half russia, \$8.00.

The great popularity of Bryant's Surgery with the profession in America is attested by the fact that four editions of the work have been called for in something less than six years. The book has successfully divided honors with the great works of Gross and Erichsen, and bids fair to take the lead as a manual for the general practitioner and as a text-book for the student.

If the reason for this mark of favor be sought for it will be found to consist, first, in the author's felicitous style, second, in the admirable arrangement of the matter, and third, in the fact that he has not, like the masters named, suffered his work to grow into unwieldy proportions.

The third American edition of Bryant was revised by Dr. John B. Roberts, of Philadelphia; the present edition is fresh from the hands of the author, who testifies his appreciation of the labors of his former pupil by retaining many of the additions made by this accomplished surgeon.

A casual reading is sufficient to show that the author is but little disposed to indulge in hypotheses or balance arguments *pro* or *con* over mooted points, while he seizes upon a fact with the hand of a cunning workman and makes it do service for all that it is worth.

In treating of the etiology of syphilis, he turns his back upon the micro-biologists, dismissing the subject with the simple statement that the nature of its specific poison is unknown. Again, while devoting considerable space to antiseptic surgery and according all honor to Mr. Lister for his having "helped more than any one else to establish the value of antiseptic drugs and antiseptic precautions in the practice of surgery all over the world," he takes to task those overcredulous surgeons who have made extravagant claims for the all-sufficient efficacy of antiseptics. He says "that an enormous superstructure has been raised by the ingenuity of its builders upon a narrow foundation, and that good results have been too

hastily attributed to causes which have been but some of the factors of a work to which others equally potent for good have, without doubt, contributed."

In the matter of surgical interference in shot wounds of the intestines the author has nothing to say as drawn from his own experience, but quotes to the point the prophecy of Dr. Otis, who said in 1871 that "prejudices similar to those that ovariectomy has successfully overcome in the last quarter of a century will be dispelled by the results of exploratory incisions in gun-shot wounds of the abdomen before many years have elapsed."

From this it would seem that the author's work of revision was over before Dr. Bull, of New York, had reported his celebrated successful case.*

Great care has been devoted to the department of morbid growths, which are treated with remarkable fullness of text and liberality of pictorial illustration. Indeed, few special treatises can be said to do the subject more ample justice. The department of urinary surgery is also noticeable for similar features of excellence. The illustrations throughout the work are of a superior type.

On the Wasting Diseases of Infants and Children. By EUSTACE SMITH, M. D., London. Fourth edition. 8vo., pp. viii and 278. Library of Standard Medical Authors for 1885. New York: William Wood & Co. 1885.

This is a standard work, and will rank among the most valuable of the series for 1885. It is the book to which the author owes in large measure his great reputation in pediatric medicine, and, if he had written no other, would have been sufficient to support his fame.

The volume opens with a chapter devoted to the susceptibility of infants to disease, and the discussion of some questions relative to diagnosis and therapeutics, after which the following topics are considered in regular order: Simple Atrophy from Insufficient Nourishment; Chronic Diarrhea (chronic intestinal catarrh); Chronic Vomiting (chronic gastric catarrh); Rickets; Inherited Syphilis; Mucous Disease; Worms; Chronic Pulmonary Phthisis; Caseation of Lymphatic Glands; Diet of Children in Health and Disease.

Each section of the work is developed with conscientious attention to every essen-

tial detail, and while nothing relative to the pathology and clinical history of the affections named is omitted, the great question of constructive therapeutics is kept ever in the foreground and discussed in all its bearings after the manner of one who has mastered this difficult problem in infantile medicine. The proper exhibition of constructives in combating the wasting diseases of children is ever a question of prime moment with the physician, and it is to the eminently successful presentation of this theme that the work under notice owes its well-earned popularity.

Some Interesting Reflex Neuroses with Treatment and Comments. By John J. Caldwell, M. D., Baltimore, Md. Reprint from Virginia Medical Monthly.

Condensed Monthly Statement of Mortality in the City of Nashville, Tenn., for the months of April and May, 1885. Chas. Mitchell, M.D., Health Officer.

Shall we Hang the Insane who Commit Homicides? By Clark Bell, Esq., ex-President Medico-Legal Society, New York, Honorary Member of the Societe de Medicine Mentale de Belge, etc. Reprinted from the Medico-Legal Journal.

Dr. F. E. Daniel, senior editor of the Texas Courier Record of Medicine, has sold his interest in that journal, and expects to begin the publication of a monthly journal to be called Daniel's Texas Medical Journal. The first number will be issued at Austin about July 10th. He calls on the profession of Texas to assist him in the enterprise, and should be greeted by a liberal response.

Pruritic Catarrh or Hay Fever: Its Treatment. By J. A. Stucky, M. D., Surgeon to St. Joseph's Hospital, Vice-President of the American Rhinological Association, etc. Read before the American Rhinological Association. Reprinted from St. Louis Medical and Surgical Journal, June 1885.

This interesting reprint deals with the treatment of a most obstinate affection. The author claims that most cases are accompanied with or caused by nasal catarrh, and the indication for treatment is the removal of the cause. During the paroxysm the treatment should be palliative, all irritants being carefully avoided. If nasal hypertrophies exist they should be removed.

* New York Medical Journal, Feb. 14, 1885.

Correspondence.**LONDON LETTER.**

[FROM OUR SPECIAL CORRESPONDENT.]

In a return relating to experiments on living animals, issued by Inspector General Bush, it is stated that forty-nine persons held licenses during 1884, and the total number of experiments of all kinds performed was about four hundred and forty-one. The animals operated upon were all rendered insensible during the experiments. Of one hundred and forty-five experiments ninety-nine consisted in simple inoculation with a morbid virus, in which no operation beyond the prick of a needle was required, and for which the administration of an anesthetic would only have entailed needless annoyance and distress to the animal. In these experiments any appreciable suffering would be felt only in those cases in which the inoculation took effect, involving about the same amount of pain as ensues on ordinary vaccination for the brief period the animals were allowed to survive. Of such cases about sixteen occurred. Of the remaining forty-six experiments under these certificates twenty-four were performed for the purpose of medico-legal inquiries in cases of suspected poisoning, resulting in the death by tetanus of three frogs and six mice, which survived, however, only a few minutes. Ten other cases under the same head were experiments on the infection of fish with a species of fungus very destructive in certain rivers and streams, and five on the effects of immersion of fish in distilled water, which proved fatal to about thirty minnows and sticklebacks. In none of these cases could it be said that any appreciable suffering was inflicted. In seven cases, in which salts of ammonia were hypodermically injected, two are returned as suffering pain, but of a very trifling character. Of seventy-six experiments under certificates, forty-seven required a simple operation, but this being done under anesthesia was unfelt, and the after-effects, though in many of the cases resulting in partial paralysis, are reported as having been unattended with actual pain in any case. The remaining twenty-nine were by simple inoculation, and none were attended with pain. The amount of direct or indirect actual suffering as the result of physiological and therapeutic experiments performed in England and Scotland under the act in the year 1884 was wholly insignificant.

Dr. John W. Tripe, M. D., read a paper at a meeting of the Association of Public Sanitary Inspectors on Disinfectants and Their Sanitary Uses, referring to the antiquity of the use of disinfectants for preventing the spread of infectious diseases. A contrast was made between the thoroughness of the precautions exercised in ancient times to the looseness which characterized those of the present day. It was necessary, if disinfectants were to do their work properly, that they should be used with a definite object, as they only worked within certain narrow limits, and must be employed in such a way as to be precisely adjusted to their work. Thus numerous experiments showed that, although the time for which infected articles were exposed to the action of disinfectants had a material bearing on the result, yet that there was a certain limit of strength which the disinfecting agent must have in relation to the article disinfected, for, if too weak, or used for too short a time, the contagion would not be destroyed.

The paper then dealt with the various kinds of disinfectants, and their special uses, and described how a room should be fumigated with sulphur. In selecting a disinfectant for general use, it was said cheapness in comparison with their disinfecting power and freedom from poisonous qualities seemed to be leading indications. Unfortunately, however, most of those which were cheap and non-poisonous, such as chloral and alum, were not sufficiently active for general use, while sulphate or perchloride of iron were objectionable because they stained linen and woollen goods, and should be carefully used. The same objection applied to Condy's fluid, when used of a sufficient strength to act as a germicide. The most certain and useful disinfectant was dry heat.

Speaking of Condy's fluid, it was stated that there was little if any use in evaporating it in a sick room occupied by a small-pox patient, except for the purpose of removing unpleasant smells. The same remark Dr. Tripe applied with greater force to carbolic acid, as it was not an oxidizing agent, and could not be safely breathed when it existed in sufficient quantity to prove a disinfectant. For the disinfection of ditches, special mention was made of Stillé's mixture for deodorization, consisting of lime, tar, and salts of magnesium, mixed with water. The disinfection of polluted rivers depended mainly on the kind of refuse passed into them. So that it was

impossible to lay down any rule for general use. With regard to sewers the occasional use of carbolic acid was of comparatively little use, as the quantity of sewage quickly carried it away, but if the gullies were trapped, carbolic, sanitas, or terebine powders might be usefully employed. The offensive smell from ventilating openings of sewers at the level of the street was believed to be best remedied by animal charcoal being placed in perforated trays or boxes between the openings and the sewage, but unless the charcoal was frequently changed and kept dry no good effect resulted from its use.

Professor Tyndall says one of the most extraordinary and unaccountable experiences in medicine is the immunity secured by a single attack of a communicable disease against future attacks of the same malady. Reasoning from analogy, he has ventured to express the opinion that the rarity of second attacks of communicable disease is due to the removal from the system, by the first parasitic crop, of some ingredient necessary to the growth and propagation of the parasite.

The Prince of Wales has fixed Saturday, July 4th, for the ceremony of opening the Albany Memorial and other buildings of the National Hospital for the paralysed and epileptic, Queen Square, Bloomsbury. The Prince and Princess Christian have signified their intention to be present, and the Archbishop of Canterbury will take part in the proceedings.

Dr. F. H. Champneys, in a discussion upon certain points in the diagnosis of cervical stenosis, said that, as regards the os internum, this orifice really belonged to the uterine body; and reasons were given for thinking that its size was variable in the same individual, and that it was not rigid, but underwent spontaneous dilatation, being under the dominion of uterine polarity. Dr. Champneys discussed the diagnosis of stenosis, and showed that no certain inference could be drawn from difficulty in introducing the sound, because it could not be guaranteed that the sound was passed exactly in the caliber of the canal (though this could be assured in the case of the os externum), and because it might catch in a fold of mucous membrane. The diagnosis could, however, be made, if difficulty in withdrawing the sound were experienced, because the instrument then traveled of necessity in the right path.

PARIS, May 15, 1885.

Societies.

THE KENTUCKY STATE MEDICAL SOCIETY.

Proceedings of the Thirtieth Annual Session, held at Crab Orchard, June 24, 25, and 26, 1885.

[Reported by A. H. Kelch, M. D.]

In discussing the paper of Dr. Mathews (which closed the report in last week's issue of the NEWS) Dr. M. F. Coomes, of Louisville, said:

The most important point which now occurs to me is with reference to the speaker's words concerning abdominal surgery. It is a well-known fact that the tissues of the abdomen, and particularly of the intestines, are abundantly supplied with blood; in this respect being similar to the tissues of the face, and they therefore, when other circumstances are favorable, heal readily and completely. For my own part, if I were suffering from a wound of the abdominal structures and any hesitancy should be manifested on the part of the surgeon called to my side about opening up the abdominal cavity in order to determine and, if possible, remedy the mischief done, I should unhesitatingly insist upon its being done at once.

With regard to the use of iodoform, I would say that my experience with the drug has been somewhat peculiar. I have used it in two instances in the form of insufflation upon the throat. In each case, within a few minutes after the application, the patients began to grow dizzy, complaining of a feeling of weight in the epigastrium, the pulse being quickly increased in frequency. One of these parties was a physician, and he, of course, knew what the medicine was, and suspected the cause of these sensations. He assured me that he repeated the dose again and again, always with uniform results.

Dr. Williams, of Cincinnati, said:

We have been in the habit of using cocaine a great deal in painful affections, in paracentesis of the drum membrane, etc., and with uniform satisfaction. We have sometimes used it in enucleation of the eyeball, and we have come to the conclusion that none of the American preparations are equal in efficiency to that made by Merck, of Darmstadt. There is no amount of experience in this world that has been entirely satisfactory to me in any department of work that I know of in this world, but at the same time there is no kind of doubt that the introduction of this local anesthetic has proved a very valuable addition to the means we already possess for the relief of human suffering. It is not applicable to all operations, however.

Dr. Sattler, who is associated with me, yesterday removed a tumor from the temple of a young woman, and he attempted to produce anesthesia by cocaine, using three or four injections into its structure. I don't know how much more she would have complained at the operation without the influence of the drug, but she certainly complained enough with it. In the extraction of cataract we use it now altogether, without resorting to general anesthesia.

Dr. Vance said he had made frequent applications of it to reduce the pain of small operations, adding first applications of the drug as the operation progressed. In this way he had found it very satisfactory.

Dr. Roberts said he had used it frequently in operating upon small tumors; in one case the operation was followed by the application of caustic and no pain was complained of. He had used it also in fissures, but without any good effects. In irritation or inflammation of the prostatic gland he had had some happy results.

Dr. Scott said:

Several points in this paper struck me with much force, among others that a surgeon can pass from the post-mortem table to the side of a woman in ovariectomy with no danger of carrying infection to the woman being operated upon. How far would any of us feel justified in carrying practice like that? We all feel it improper to expose ourselves to any such disease as puerperal fever, traumatic fever, or erysipelas, while we are expecting to be called to a case of confinement, and I am led to ask how much can we measure our own personal responsibility; how far can we in justice expose ourselves to these diseases we regard as infectious and contagious before going to a case of confinement, and how far can we carry disinfection to render it safe after seeing such a case to attend one of confinement?

Dr. Reamy, of Cincinnati, a well recognized authority on obstetrics and gynecology, said:

The paper just read was extremely interesting and instructive to me. So far as the statement that it is entirely safe to pass from the dead-house to the operating table is concerned, I concede that, because it is a well-known fact that the germs of decomposition which play havoc in the dead-house are not the germs that threaten danger to the living. It is a question of greater importance to determine if it is not more dangerous to pass to the lying-in chamber from the house of the living. I have no hesitation, gentlemen, in saying that if a man is in constant attendance upon a case of erysipelas, or traumatic or puerperal fever, unless he is in a position to be able to change his clothing, even to his shoes and socks, and be shampooed by his barber, and take a bath, he ought not to approach the lying-in chamber. But granting that a man can so disinfect himself, it is yet safe to say that a man who is in attendance morning, noon, and night upon these contagious diseases is not a suitable person to attend a case of obstetrics. But can a man subject himself to sufficient disinfection to justify him in attending a case of obstetrics after exposure in the sick-room of a patient suffering from puerperal fever? I believe he can. I was in consultation very recently, at Glendale, O., in a case of puerperal septicemia where, at my last visit, it was necessary for me to make complete examination, and expose myself in this way to the utmost. The case proved fatal, and the exposure was complete. On the next evening I was summoned to attend a case of confinement. As soon as I arrived home from the case of which I speak, my clothing was

completely removed from head to foot, I took a bath, and followed it by another containing as much carbolic acid as I felt inclined to bear, went to my barber, and in the evening retired to the house of the case I speak of, where I remained almost constantly for the next twelve hours, and no bad results whatever attended the case. I certainly could not have felt justified in going without taking these precautions. It does not do in these cases to simply wash the hands with great care in solutions of carbolic acid and water.

Following this discussion Dr. Martin F. Coomes, of Louisville, read a paper on "The Value of Local Agents in the Treatment of Diseases of the Eye." He spoke of atropia highly in the treatment of iritis, both as an anesthetic and mydriatic, and favored its combination in solution with morphia especially in phlyctenular inflammation. This solution should be carefully watched in the cases of children, as the speaker had known poisoning to manifest itself after using one drop of a solution containing one eighth grain of atropia to the ounce. The value of atropia however is not what it was comparatively since the introduction of hemiatropia. Carbolic acid in solution, borax, carbolized oil, tannic acid, sulphate of copper, yellow oxide of mercury, and many others of the legion of agents that have been used topically received notice and comparison.

Dr. L. S. McMurtry, of Danville, reported a case of ligature of the subclavian artery in the third part of its course for traumatic axillary aneurism, with subsequent incision of the sac and recovery. The patient was a robust man, aged thirty years, who, thirteen months previous to the operation received a pistol wound of the shoulder, the ball passing deep in the vicinity of the shoulder-joint. In a few weeks a small lump appeared in the axilla, which increased in size until, at the time of operation, thirteen months after the wound, it had reached the dimensions of a child's head. The tumor occupied the entire axillary space, and had burrowed up beneath the pectoral muscles. Paralysis of the arm, forearm, and hand resulted from the pressure on the brachial plexus of nerves, so that this member hung useless at the side. The operation was performed two days after the patient called for advice. A silk ligature was thrown around the subclavian at the external border of the anterior scalene muscle. Pulsation was at once arrested in the tumor, and never returned. The radial pulse, which, before the operation, was feeble and fluctuating, was annihilated.

The patient made a prompt recovery without accident or complication. On the 21st day the ligature came away. One month afterward the patient returned home, and was not seen for four months. After the lapse of this time, the patient again presented himself. The tumor had materially decreased in size without pulsation or tenderness. The pressure on the brachial plexus remained with the consequent paralysis. It was then determined to extirpate the tumor. The patient being anesthetized, a ligature was thrown around the axillary artery on the distal side of the tumor to control hemorrhage from collateral recurrent branches. The tumor was laid open, the clots removed, and the wound cleared. The patient is now making a good recovery, and will soon be ready to resume his occupation as a farmer.

The speaker said that when the conditions are considered, it is not surprising that ligature of the subclavian for axillary aneurism is followed by the frightful mortality of forty-eight per cent. Although embodying the principles of the Hunterian operation, it is not far removed from the method of Anel. Indeed, when, as in the case reported, the aneurism extends above the acromial thoracic branch, the circulation through the sac is completely arrested by the ligature. Hence, suppuration of the sac from the loose formation of the clot and secondary hemorrhage are to be anticipated. Again, the ligature is placed in the vicinity of large branches. These facts explain the high death-rate after the operation. The case reported is an illustrative one, and the type of a class, circumscribed traumatic aneurism resulting from a wound of the coats of the artery. The aneurism in these cases approaches in character the pathological form of the disease, with this important exception, viz., the coats of the artery above and below the tumor are not involved and are free from disease. It is this feature which makes this class of cases distinct from idiopathic aneurisms so far as prognosis and treatment are concerned. In eight cases of this class aneurism of the axillary artery, resulting from stabs and gunshot wounds, treated by ligature of the subclavian, cited by Mr. Erichsen, not one fatal result occurred.

The paper was discussed by Dr. W. O. Roberts, who, in the course of his remarks, had occasion to refer to a case of aneurism wherein the subclavian artery had to be tied three times in succession, on account of

secondary hemorrhage, at intervals of about two weeks, recovery finally taking place.

A report was next made on orthopedic surgery by Dr. Vance, in which he advocated the resection of joints in cases of deformity the result of infantile paralysis, with the view of producing bony ankylosis in the best position for use and appearance. He accepted the prevailing view of most authorities, that the results following treatment of infantile paralysis occur spontaneously, the treatment instituted simply preventing deformity and assisting locomotion. This he recorded as his experience in the effort to revive the muscles lost. He referred to the unsatisfactory results of apparatus on account of the difficulty of harmonizing the weight of those sufficiently strong with the weakened condition of the patient; yet without their use, as the patient grows older and heavier, deformity is certain to follow, and hopeless crippling is inevitable.

In order to accomplish, without artificial bracing, a degree of support sufficient to prevent deformity, it has been suggested that the residue of the paralyzed muscles have a section removed, thus gaining by an inelastic band better control of the joint below, and in some forms of talipes, calcareous, for example, that the tendo-achillis be resected to gain an inelastic band for support. A third suggestion, to excise the useless joint, producing bony ankylosis, I have taken the opportunity to put into practice. The hopelessness of these cases, otherwise coupled with the fact that the bone in young subjects readily heals, renders the prognosis far less grave than in the operations performed where bone disease exists. Such operations should not, however, be undertaken without the consent of the patient, obtained after a full knowledge of its import and possibilities. Volkman suggested such operations in 1881. It was not until May, 1882, however, that opportunity presented for your committee to put the suggestion into practice. The operation was performed upon a boy nine years of age, having a history of infantile paralysis since two years of age. The case was one of extreme valgus, in which apparatus had been used for several years with unsatisfactory results. The bony ankylosis produced secured good locomotion. An incision was made, three inches long, midway between the internal malleolus and the tendon of the tibialis anticus muscles in the axis of the extended foot, the center of the incision being over the annular ligament; the joint was opened, and the foot broken off the tibia, the ends of this bone and the fibula being sufficiently exposed to allow their being removed with the ordinary saw. The upper surface of the astragalus was shaved off with a strong bistoury, the bones brought into contact, the wound closed with stitches, and a counter opening made for rubber drainage-tube, no hemorrhage occurring except from the shaved surface of the astragalus. This was controlled by bruising the surface with the handle of the bistoury. Surgical fever reached 102° F. In three weeks the external wounds had

healed, though this had been delayed by the excessive secretion of synovia. This boy has now been walking for three years, with three-quarters of an inch shortening of that limb.

In a second case the knee was excised in a boy aged seven. The paralysis in this case was of six years' standing, with great deformity. Locomotion could only be effected by crutches. An incision was made along the inner border of the patella, having the joint for its center. The patella was removed, the ligaments divided, and the ends of the bones easily exposed and sawed off. The external ham-string was left untouched, it being the only muscle of the thigh which had any vitality left, and which, by its contraction, had produced luxation and rotation of the tibia. In ten hours after the operation the temperature was 105° F. Reasoning that nothing but latent malaria, rendered active by surgical procedure, could produce such a temperature in so short a time, quinine was given liberally, and had to be continued for some time, with the effect desired. In eight weeks he was out of bed; in three months the wound and counter opening reopened completely, following the formation of pus. Firm bony union now exists, and the boy can walk quite well. The operation was done in October, 1884.

A second case was reported, in which the ankle-joint was excised in a young woman aged twenty-five, the subject of talipes equino varus. In this case correction had been completely made by tenotomy and retentive apparatus, there being, however, complete relapse after four years. In this case, operated on before the classes at the City Hospital, there has been a good recovery, the progress of which was interrupted about the third week by diffuse cellulitis of the anterior part of the calf, which yielded readily, however, to treatment. She can bear her weight upon the foot, but is not yet allowed to walk.

In the fourth case subcutaneous osteotomy of the femur below the trochanter relieved an angular deformity of the thigh from hip disease, the hip being ankylosed with the femur at an angle of less than 90° to the pelvis, the deformity being greater because of high dorsal disease preventing lumbar compensation. Patient could stand only with great difficulty, his mode of locomotion being on all fours. After the osteotomy was complete tenotomy was performed upon the muscles going to the anterior superior spinous process. The wounds were dressed with compresses of absorbent cotton, and the case treated as a simple fracture, the boy being able to walk at the end of the fourth week.

In a fifth case of deformity in a boy seventeen years old, the result of knee-joint disease, the joint retained but little motion, the leg being fixed at an angle of 135° and

much rotated upon the thigh, with marked genu valgum. This was overcome by osteotomy of the lower end of the femur. He now walks with a comparatively comely limb, a compensation of one inch and a half being added to his shoe. The paper was not discussed.

Dr. M. F. Coomes next read a paper on the comparative value of local agents in ophthalmic practice,*after speaking of atropia, alone and with morphia, cocaine, homatropia, calomel alone, and with sugar in the form of the white powder, silver, copper, etc., he said:

Salammoniac is but little used by ophthalmologists simply because its value is little known. The stick or a saturated solution of the muriate of ammonia is one of the best stimulant applications to a thickened and sluggish conjunctival membrane with which I am acquainted. Its application is very painful for a moment, but after this first paroxysm there is always felt a sense of relief that is most gratifying as well as durable. In vascular keratitis it is often very beneficial, and so highly do I esteem it that I would prefer it above all others were I compelled to confine myself to the use of one stimulant.

The speaker then referred to Dr. Knapp's unfortunate experience with jequirity, and closed his paper with the hope that this agent, promising so much in its advent into professional use as a remedy for a most unhappy state of affairs, would still, with further use and when better understood, be found to have many of the virtues ascribed to it on its first appearance.

Dr. A. W. Johnstone next read on surgery of the genito urinary organs.

THURSDAY AFTERNOON.

The session was begun by the reading of a paper, by Dr. Dudley S. Reynolds, on "Some of the Causes of Failure in Operations for the Correction of Squint." A few extracts will better serve to outline the intent and scope of the paper than an abstract could possibly do. After a few preliminary remarks the speaker said:

In 1862 Donders gave the first hint at the real causes of convergent and divergent squint. Before that time, however, central lesions of the nervous system, traumatism, and habit were regarded the most common causes. Graefe was quick to apply the optical principle suggested by Donders. Others took up the subject, and in 1864, when Donders wrote his great work on the Anomalies of Accommodation and Refraction for the New Sydenham Society, of London, he presented to the world a clear and well-nigh complete analysis of all the varying forms of squint, demonstrating the causes both predisposing and ex-

citing, and showing wherein Dieffenbach's already universally adopted tenotomy had not been attended with that degree of success necessary to establish it as a universally justifiable operation.

What Graefe regarded as lost physiological sensibility through psychical exclusion Mooren correctly interpreted as deficient refraction. Strangely enough, however, Mooren did not establish the relations which abnormal refracting power sustains to the accommodative function.

Further on, Dr. Reynolds said:

To be plain, the world now recognizes in all the various forms of squint a certain relation to the acuity of vision depending upon irreconcilable obstacles to the harmonious fixing of the two eyes upon a single object. The focusing power and the accommodative power are not the same, yet they are intimately associated with each other, and any disturbance in their normal relations may create the predisposing cause of some form of squint; active accommodation implies the power of harmonious convergence of the optical axes of the two eyes, and a normal power of fixation. The fixing power will depend mainly upon the state of the perception, while the converging power will depend upon the normal state of the recti muscles, and these in turn upon normal nerve- and blood-supply as well as constitutional vigor. Central nerve lesions may, by disturbing motor branches, create spasm in the muscle or paresis. The pressure of morbid growths may exercise similar power.

As a conclusion, later on, the speaker said:

I am persuaded that the first step in all cases should be directed toward the correction of errors of refraction; first, to the acuity of vision, and subsequently to the inharmonious muscular action.

This done, in a later paragraph, the following occurs:

If the subject have no organic defect other than the insufficient refraction, the squint may be corrected by suspending the patient's accommodation, and correcting the error of refraction. If organic change has occurred, this must be corrected by tenotomy, carefully done, the error of refraction being at the same time overcome by the use of suitable glasses.

The speaker then traced the deleterious effects upon the mental development of children the subject of these deformities, and showed how many cases of that chain of nervous phenomena, now called *neurasthenia*, are the results of errors of refraction and deficient accommodative power, suggesting, of course, for their relief the correction of these abnormal conditions.

In a brief summary, said he:

Failures in the attempt to correct squinting are to be attributed to neglect on the part of the surgeon to rectify at the same time deficiencies in the refractive and accommodative powers of the

eye; neglect of the patient to observe the rules laid down for this purpose, and more rarely, perhaps, to bungling and unskillful execution of the tenotomy.

The paper was not discussed.

Dr. Wm. Cheatham read a paper on otology, in which he confined himself to a few points in the proper management of acute catarrh of the middle ear. He said the treatment of these affections had recently become simplified and more efficacious. To their bad management many cases of intractable chronic ear suppuration can be traced. Four cases were reported, showing the efficacy of proper treatment, which consists of leeches, hot-water injections, and a dose of calomel and soda, with a chlorate of potassium gargle. At the end of three or four days inflation, by Gruber's method, is also employed. If there is much pain opium is also used. Poultices, he said, were injurious in this class of cases, the hot water and leeches being far more beneficial.

This paper, also, was not discussed.

Strychnine and Mercuric Bichloride in the Treatment of Phthisis, was the title of a paper read by Dr. T. D. Fink. After reporting five cases treated in this manner, all of which did well, Dr. Fink spoke as follows:

Bichloride of mercury in the treatment of tubercular phthisis is in part based on the theory of Koch as to its pathology, a theory that might well be graced with the term fact, for there is none more clearly demonstrated nor so generally accepted as this.

In treating tubercular phthisis a medicine must be sought that will antagonize its cause, one that will destroy the germ. Must we needs look beyond bichloride, the greatest germicide, the king of antiseptics—an agent that has so won the confidence of its advocates that many, notably Schaefer, of Hamburg, since using it regards a compound fracture with but little more concern than a simple one. But should we deny it first rank among germicides there is still a plea for its use. It has been established that the bacillus flourishes in the strumous subject. Bichloride changes the soil, so to speak, rendering it less favorable to the development and multiplication of the germ. It promotes absorption of the organic element of the tubercle. It hastens the elimination of effete matter, which, remaining in the system, would itself, through diastatic properties incite rapid oxidation, hence tissue waste.

Strychnine proves a most valuable congener. On account of its effect on the sympathetic ganglia, it arouses the *trophic* nerve, so to speak, to proper performance of function. Under its influence the demand for nutriment on the part of the individual tissues is expressed in an augmented appetite and the food taken is digested and assimilated, thereby preventing the vomiting. By checking night sweats and colliquative diarrhea,

it rids the consumptive of two distressing symptoms as well as two persistent ravishers of his strength.

While praising these two agents, strychnine and bichloride, I neither forget that they must frequently be aided by other drugs to allay certain symptoms, especially cough and hemorrhages, until the general condition has been improved, nor that animal food is the desideratum in phthisis.

[TO BE CONTINUED.]

Selections.

THE SCIENCE OF CHANGE OF AIR.—In battling with disease "change of air" is not the least important among our therapeutical resources, though we fear, in prescribing it, we are far too often led by the dictates of the latest fashion in making our selection of the place to which we recommend our patients to go. Fortunately for us, almost any change proves beneficial to the vast majority of our patients. In their case, it is not merely change of air that is required, but change from the monotonous routine of their every-day life; new surroundings, new faces, new scenes to "switch" the action of the brain on to fresh lines, and so gain rest, and renewed vigor for those special portions of the brain which have, by prolonged strain in the one groove of thought, become exhausted. For such cases it is a matter of small moment what change is taken, so long as it is a pleasant one, full of fresh interests to amuse and stimulate a tired nervous system. In some cases, however, there are points of graver importance to be considered, when it becomes absolutely necessary to take into account the special atmospheric conditions of a place or district. It is necessary to weigh well the influences such conditions are likely to exert upon the well-being and physical condition of the case which may be especially under our consideration. To enable us to do this satisfactorily, we should understand in what way the physical condition is influenced by atmospheric surroundings and change. A useful contribution to the literature of the subject, from the pen of Dr. David S. Skinner, has just made its appearance, and will awaken fresh interest in the subject. The author seems to have given long and careful attention to the question in its scientific aspects, and his conclusions appear to be thoroughly sound and interesting from a clinical point of view. He treats of the physiology of respiration, products of waste,

urea, and fat, atmospheric pressure, the watery vapor of the breath, ozone, and electricity, animal electricity, climate, and topography. Great stress must always be laid upon the necessity of promoting, to the fullest extent, the exhalations of moisture as a means of getting rid of waste material from the body, the drier the atmosphere, the greater is the amount of moisture exhaled, and *vice versa*. Where the atmosphere is humid, and the escape of moisture interfered with, increased work is thrown upon the kidneys, which, in time, tends to set up mischief and disease in them, besides influencing the general health of the body and its functions. It must be remembered that, in the process of combustion which is going forward in the tissues, part of the oxygen respired enters into combination with the carbon to form carbonic acid, and part combines with the hydrogen to form water, the latter being specially furnished by the fatty tissues of the body. Dr. Skinner says, "A person with the tendency to form fat, I have known to have the fat to a very great extent removed under the influence of a mountain residence where ozone was a constant constituent of the air." The explanation of it seems simple. In a dry atmosphere supplied with condensed oxygen, the dry air conduces to the uniting together of oxygen and hydrogen in the system to form water. In speaking of atmospheric pressure, Dr. Skinner points out the dangers of a too rarefied air, and insists that the question of calculating the proper elevation a patient may require is a most important one; that a too high position in the Alps may be as injurious as one too near the sea level. He directs special attention to the effects of ozone and electricity in the air, and to the subjects of electrical conditions in our own bodies, in their relationship to the maintenance of health. Undoubtedly, nerve force is greatly influenced by variations in these conditions, and through this influence upon our nervous system, all the functions of the body are governed for good or ill. One experiences this at once in the wide difference of feeling that exists, of hopefulness and buoyancy in fine, dry, sharp, sunny weather, on the one hand, and the languor and depression of spirits which make life miserable in cold, wet, or damp and sunless weather, on the other.

The subject is one of deep and practical interest to medical men whatever may be their special position in the profession, and though little is added to existing knowledge

by Dr. Skinner's work, there is much in it suggestive of mental food, for careful study and reflection, and if it but serves to stimulate other and deeper inquiries in the field of climatic influence, our therapeutic resources will have received a helpful adjunct.—*Medical Press and Circular*.

ANODYNE COUNTER-IRRITATION.—Dr. Richardson, on the theory that if by strong counter-irritation the surface of the body, in any part, were rendered very vascular, the absorption of a narcotic applied to that surface caused a local insensibility much more intense than if the narcotic had been simply placed on the skin in its natural state, combines a narcotic with a counter-irritant, as follows:

1. Mustard, four tablespoonfuls; tincture of opium, two fluid drams; glycerine, one tablespoonful; water, heated to 100 degrees F. To be applied on sponge or linen in the usual way.

2. Mustard, four tablespoonfuls; soda carbonate, half an ounce; Dover's powder, one dram; glycerine, one tablespoonful; water, heated, sufficient to make a poultice. This forms an alkaline as well as an anodyne counter-irritant for lumbago and muscular pains.

3. Cantharidine plaster, one dram; extract of belladonna, one grain. To make an anodyne blister. This is useful for the blister at the back of the ear, in case of pain from subacute inflammation.

4. *Emplastrum calefaciens* (*Emplastrum picis cum cantharide*, U. S.) is a good medium for anodyne counter-irritation. With it morphia, codeia, and other alkaloids combine well, on addition of a little glycerine. *Journal American Medical Association*.

THE TREATMENT OF FOUL WOUNDS BY HOT AIR.—A correspondent of the *Lancet* writes concerning the above as follows:

The perusal of Mr. Kesteven's interesting paper on antiseptic steam irrigation of foul wounds induces me to offer you a description of a method of treatment by hot air that for some years I have used with marked success in cases of chronic, indolent, and varicose ulcers, syphilitic or otherwise, which are known to every practitioner, and are a source of annoyance to the patient and his friends, from their offensive discharge. I employed a village carpenter to make the box I used. It is constructed of well-seasoned wood, the bottom, or floor, consisting of three layers about an inch apart from

one another, the outer one, of stout sheet zinc or tin plate, is that against which the flames of the spirit-lamps impinge; the middle is of perforated zinc, and above that a wooden floor, also perforated by numerous holes. The apparatus is placed on the bed, and the limb put in it by lifting the two lids which are perforated by holes for the escape of hot air and vapor; the spirit-lamps two or three in number, are lighted, and the temperature is quickly raised within the box to as great a height as can comfortably be borne by the patient, and maintained for two hours, the process being repeated morning and evening.—Sprinkling the inside of the box with an ounce or so of terebinte is of value in neutralizing the offensive smell from a large ulcer, and also probably contributes to the stimulative effect of the hot air. In syphilitic cases calomel may be vaporized by sprinkling on zinc floor above the lamps. Before placing the limb in the box I well wash off as much purulent matter as possible with a syringe and a solution of boracic acid. After removal from the box I apply a piece of lint cut to the shape of the wound, but a quarter of an inch smaller, and soaked in a saturated solution of boracic acid, and either no bandage or just enough to keep the lint in place. I need hardly add that the rapidity of healing will be greatly accelerated if the patient will maintain the horizontal position entirely during the treatment; in other words, keep his bed or sofa. I have found large chronic ulcers of many years' standing heal rapidly under this process, and the limb remain sound and useful for years with the help of an elastic stocking or bandage. I think both Mr. Kesteven's experience and my own go to prove that in heat we have a manageable as well as powerful stimulant which is undeservedly neglected in treating the class of cases referred to."—*Medical Record*.

DIED of an overdose of reconstruction! A good epitaph for a dead Congress.

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes in the Stations and Duties of Officers serving in the Medical Department of the United States Army, from June 28, 1885, to July 3, 1885:

Capt. F. C. Ainsworth, Assistant Surgeon, relieved from duty at Hdqrs' Dept. Mo. (S. O. 93, Dept. Mo., June 26, '85.) *Capt. B. D. Taylor* Assistant Surgeon, assigned to duty at Little Rock Bks., Ark. (S. O. 139, Dept. East, July 1, 1885.)